In other words, the 12-aminododecanoic acid and/or dodecane lactam is the main component, and the polyfunctional monomer such as a diamine and a dicarboxylic acid is only an additional minor component.

Nishi further states in column 7, lines 4-7, that the amount of a polyfunctional monomer is preferably from 0.2 to 10 mass%, more preferably 0.5 to 10 mass%, based on 12-aminododecanoic acid and/or dodecane lactam. Nevertheless, in response to the Applicants' prior argument, the rejection states on page 5 of the Official Action that 12-aminododecanoic acid and/or dodecane lactam are not dicarboxylic acids or diamines.

The 12-aminododecanoic acid and/or dodecane lactam are components which, by polymerization, form polyamide 12(a), which is required in Claim 1 of Nishi. On the other hand, the dicarboxylic acids or diamines in Nishi are only minor components which may be incorporated into polyamide 12(a).

In contrast, the semi-aromatic polyamide (B) comprises a dicarboxylic acid unit and a diamine unit, which are main units or main components. The dicarboxylic acid unit comprises a terephthalic acid and/or naphthalenedicarboxylic acid unit in a portion of about 50 mol% or more based on all dicarboxylic acid units, and the diamine unit comprises a 1,9-nonane-diamine and/or 2-methyl-1, 8-octanediamine unit in a proportion of about 60 mol% or more based on all diamine units.

That is, the terephthalic acid and/or naphthalenedicarboxylic acid unit is in an amount of about 50 mol% or more of all dicarboxylic acid unit, and the 1,9-nonane-diamine and/or 2-methyl-1,8-octanediamine unit is in an amount of about 60 mol% or more based on all diamine units. The terephthalic acid and/or naphthalenedicarboxylic acid unit and the 1,9-nonane-diamine and/or 2-methyl-1,8-octanediamine unit are clearly the main components (more than about 50 mol%) of the Applicants' polyamide (B).

Furthermore, it is noted that the content of the Applicants' semi-aromatic polyamide (B) is preferably 80 % by weight or more, further preferably 90% by weight or more, which also suggests that the semi-aromatic polyamide (B) is the main component, not an additional minor component.

In any event, the total amount (about 55 mol% or more) of the dicarboxylic acid units of terephthalic acid and/or naphthalenedicarboxylic acid unit and the diamine units of 1,9-nonane-diamine and/or 2-methyl-1,8-octanediamine unit based on the Applicants' polyamide (B) is

fundamentally different from the amount of from 0.2 to 10 mass%, based on 12-aminododecanoic acid and/or dodecane lactam, which forms the polyamide 12 as the main component of Nishi.

The rejection also states on page 5 of the Official Action that Nishi teaches in column 5, line 55 - column 7, line 17, embodiments wherein the terephthalic acid and/or naphthalenedicarboxylic acid units are present in 100% mass by weight of all diamine and dicarboxylic units.

As mentioned above, the diamine and dicarboxylic units in the polyamide of Nishi are only minor components of the polyamide. Therefore, even in the case that all of the diamine and dicarboxylic units are constituted of terephthalic acid and 1,9-nonane-diamine in Nishi, the total amount of the terephthalic acid and 1,9-nonane-diamine is only about 0.2 to 10 mass% of the polyamide as a whole.

In sharp contrast, the Applicants' polyamide (B) is basically constituted of the diamine and dicarboxylic units, and the diamine and dicarboxylic units are basically in an amount of 100 mol%. This is clear from the Applicants' disclosure.

Hence, the polyamide 12 (a) of Nishi is fundamentally different from the Applicants' semi-aromatic polyamide (B). Thus, Nishi does not disclose, teach or suggest the subject matter of the Applicants' independent Claims 12 and 22.

The Applicants respectfully submit that Nishi JP fails to cure the deficiency set forth above with respect to Nishi. As a consequence, even if one skilled in the art were to import the teachings of Nishi JP into Nishi, the result of that combination would still be completely different from the subject matter of Claims 12, 13, 17, 19, 21-23, 27-29, 31 and 33-35. Withdrawal of the rejection on this basis alone is respectfully requested.

Moreover, when Comparative Example 3 is compared with Example 1 in Table 1 of the Applicants' specification, it is clear that Comparative Example 3 using a polyamide made from adipic acid and m-xylylenediamine is significantly inferior in low temperature impact resistance, fuel permeation coefficient, interlayer adhesion, sour gasoline resistance and thermal resistance to Example 1 using a semi-aromatic polyamide comprising terephthalic acid and/or naphthalenedicarboxylic unit and 1,9-nonane-diamine and/or 2-methyl-1,8-octanediamine unit.

The above superior effects of the combination of terephthalic acid and/or naphthalenedicarboxylic unit and 1,9-nonane-diamine and/or 2-methyl-1,8-octanediamine unit in semi-aromatic polyamide (B) are surprising and unexpected.

Nishi describes that adipic acid and m-xylylenediamine may be used as the diamine and dicarboxylic acid. Therefore, there is no teaching or suggestion in Nishi to select a semi-aromatic polyamide (B) comprising terephthalic acid and/or naphthalenedicarboxylic unit and 1,9-nonanediamine and/or 2-methyl-1,8-octanediamine unit of the Applicants' claims.

The Applicants accordingly respectfully submit that they have established surprising and unexpected results over both Nishi JP and Nishi. The Applicants further respectfully submit that this additional unexpected result further compels removal of the rejection based on the combination of Nishi JP with Nishi. Withdrawal of the rejection is accordingly respectfully requested.

Claims 36 and 37 stand rejected under 35 USC §103 over the further combination of Audenaert with Nishi JP and Nishi. The Applicants respectfully submit, however, that Audenaert fails to cure the deficiencies set forth above with respect to the combination of Nishi JP with Nishi. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,

T. Daniel Christenbury
Reg. No. 31,750
Attorney for Applicants

TDC/vbm
(215) 656-3381